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IN THE CLAIMS:

The claims as currently presented and under consideration, are presented below for the Examiner's convenience and to comply with 37 CFR §1.121:

- 1. [Cancelled]
- [Currently Amended] An isolated polynucleotide encoding a glycosyl hydrolase
 <u>Family 3 endoglucanase enzyme having β-glucosidase activity</u> from a fungal source, which polynucleotide comprises a nucleotide sequence encoding an enzyme having β-glucosidase IV activity selected from the group consisting of:
 - (a) a nucleic acid sequence which encodes or is complementary to a sequence which encodes a β-glucosidase 4 polypeptide having at least <u>985</u>% sequence identity to the amino acid sequence presented in Figure 2;
 - (b) a nucleic acid sequence which encodes or is complementary to a sequence which encodes a β-glucosidase 4 polypeptide having-at-least 90% sequence identity to the amino acid sequence presented in Figure 2;
 - (e) a nucleic acid sequence which encodes or is complementary to a sequence which encodes a β-glucosidase 4 polypeptide having at least 95% sequence identity to the amino acid sequence presented in Figure 2;
 - (bd) a nucleic acid sequence which encodes or is complementary to a sequence which encodes a β-glucosidase 4 polypeptide having the amino acid sequence presented in Figure 2; and
 - (ce) a nucleic acid sequence presented as SEQ ID NO:3, or the complement thereof; and
 - (f) —a nucleic acid sequence that hybridizes, under high stringency conditions to the sequence presented as SEQ ID NO:3, or the complement or a fragment thereof, wherein said isolated polynucleotide encodes a polypeptide having the biological activity of a β glucosidase

wherein % identity is calculated using the CLUSTAL-W program in MacVector version 6.5, operated with default parameters, including an open gap penalty of 10.0, an extended gap penalty of 0.1, and a BLOSUM 30 similarity matrix.

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- 3. [Cancelled]
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- 4. [Presently Amended] AnThe isolated polynucleotide sequence that hybridizes, under high stringency conditions to the sequence presented as SEQ ID NO:3, or the complement or a fragment thereof, wherein said isolated polynucleotide encodes a polypeptide having the biological activity of a β-glucosidaseof Claim-2, wherein hybridization is conducted at 42°C in 50% formamide, 6X SSC, 5X Denhardt's solution, 0.5% SDS and 100 μg/ml denatured carrier DNA followed by washing two times in 2X SSPE and 0.5% SDS at room temperature and two additional times in 0.1 SSPE and 0.5% SDS at 42°C.
- 5. [Original] The isolated polynucleotide of Claim 2, wherein said polynucleotide is an RNA molecule.
- 6. [Previously Amended] The isolated polynucleotide of claim 2 encoding an enzyme having β-glucosidase activity, wherein the enzyme is isolated from a *Trichoderma* source.
- [Previously Amended] The isolated polynucleotide of Claim 6, wherein the enzyme is isolated from *Trichoderma* reesei.
- 8. [Presently Amended] An expression construct comprising a polynucleotide sequence (i) having at least <u>98</u>85% sequence identity to the amino acid sequence presented in Figure 2, or (ii) being capable of hybridizing to a probe designed to the nucleotide sequence encoding the amino acid sequence disclosed in Figure 2 under conditions of intermediate to high stringency, or (iii) being complementary to a nucleotide sequence encoding the amino acid sequence having at least <u>98</u>85% sequence identity to the amino acid sequence presented in Figure 2.
- 9. [Previously Amended] A vector comprising the expression construct of Claim 8.
- 10. [Original] A vector comprising an isolated polynucleotide of Claim 2, operably linked to control sequences recognized by a host cell transformed with the vector.

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- 11. [Original] A host cell transformed with the vector of Claim 9.
- 12. [Original] A host cell transformed with the vector of Claim 10.
- 13. [Original] The host cell of Claim 12, which is a prokaryotic cell.
- 14. [Original] The host cell of Claim 12, which is a eukaryotic cell.
- 15. [Original] A recombinant host cell comprising a polynucleotide of Claim 2.
- 16. [Original] The recombinant host cell of Claim 15, which is a prokaryotic cell.
- 17. [Original] The recombinant host cell of Claim 15, which is a eukaryotic cell.
- 18. [Cancelled]
- 19. [Original] A method of producing an enzyme having β-glucosidase activity, comprising:
 - (a) stably transforming a host cell with an expression vector comprising a polynucleotide as defined in Claim 2;
 - (b) cultivating said transformed host cell under condition suitable for said host cell to produce said β-glucosidase; and
 - (c) recovering said β-glucosidase.
- 20. [Original] The method of Claim 19 wherein the host cell is a filamentous fungi or yeast cell.
- 21. and 22. [Cancelled]
- 23. [Previously Amended] An antisense oligonucleotide complementary to a messenger RNA that encodes a β-glucosidase 4 polypeptide having the sequence presented as SEQ ID NO:2, wherein upon exposure to a β-glucosidase-producing host cell, said oligonucleotide inhibits the production of β-glucosidase by said host cell_compared to a control host cell.

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24. [Original] The antisense oligonucleotide of Claim 23, wherein the host cell is a filamentous fungi.

25. [Cancelled]

- 26. [Previously Amended] A method of expressing a heterologous polypeptide having β -glucosidase activity in an *Aspergillus* species, comprising:
 - (a) Providing a host Aspergillus with an expression vector comprising a
 polynucleotide encoding a signal sequence linked to a polynucleotide
 encoding a heterologous β-glucosidase according to claim 2, thereby
 encoding a chimeric polypeptide;
 - (b) Cultivating said host Aspergillus under conditions suitable for said Aspergillus to produce said chimeric polypeptide, wherein said chimeric polypeptide is produced.

27 -36. [Cancelled]